DATA FLOW CHASING

ABSTRACT OF THE DISCLOSURE

5   Existing systems use interprocedural data flow to analyze the source code of an entire program thereby requiring significant resources. Instead forward and backward chase components reference data structures (e.g., state machines) that identify instructions within a intraprocedural data flow graph. Based on how states of the state machine correspond to instructions in the data flow, the state machines direct the data

10   flow chase to other procedures in a call graph, to instructions indicated in a global reference list, to instructions indicated in a field reference list, to instructions indicated by a pointer dereference, or to another instruction in the present procedure. Then, the chase continues in the data flow graph of the procedure containing the instruction.